

REMARKS

The Office Action mailed June 17, 2005 rejected claims 1-22 under Section 103(a) as unpatentable over Norand in view of Coble. The Office Action noted as follows:

Regarding Claim 1, Norand teaches:

a handheld computer adapted to collect construction quality data from the field;

Reference X1 page 2 paragraph 3 line 1-3, Norand Pen*Key handheld computers are used in the field.

Reference X1 page 2 paragraph 3 line 9-10, inspection reports (i.e. construction quality data) from the field are collected by Norand system.

a planning system to track budgetary information;

Reference X1 page 3 paragraph 2 line 2-4, time and materials for construction contractors (i.e. budgetary information) is tracked by the Norand system.

a construction system to track material consumption and progress for each project,

Reference X1 page 2 paragraph 3 line 7-10, project information and time sheets for employees tracked by system.

the construction system adapted to receive quality data collected from the handheld computer,

Reference X1 page 2 paragraph 3 line 9-10, inspection reports (i.e. construction quality data) from the field are collected by Norand system -see line 3-4, this information is uploaded to the mainframe (i.e. construction system).

store daily project reports

Reference X1 page 2 paragraph 3 line 8-10, forms (i.e. reports) are used to store information that was previously hand written. These forms include daily time sheets and project information (i.e. daily project reports).

and generate key indicator reports

Reference U1 page 4 paragraph 11 line 1-3, reports collected from data entered into the system can be generated of any key indicators regarding worker performance.

Norand does not teach:

a design system to perform site engineering assessment;

Coble teaches:

a design system to perform site engineering assessment;

Page 4 paragraph 1 line 5-7, handheld system incorporates computer aided design (CAD) drawings to record construction activities (i.e. site engineering assessment).

Page 4 paragraph 1 line 12-15, construction activities can be assessed and recorded using computer aided design (CAD) system.

Both Coble and Norand disclose providing wireless mobile computing capability to field workers, thus both Coble and Norand are analogous art.

Coble teaches that providing construction crews in the field with mobile wireless devices improves their productivity (Page 3 paragraph 2 line 1-2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Norand, regarding providing field workers with mobile computers, with providing mobile workers with the capability of providing site engineering assessments, as taught by Coble, because it would improve the productivity of construction workers at the job sites.

Applicants respectfully traverse the rejections.

The Section 103 Rejection

Applicants respectfully traverse the Section 103(a) rejection. First, Norand fails to show the planning system to track budgetary information. Reference X1 page 3 paragraph 2 line 2-4, shows the Norand tracking time and materials for construction contractors (i.e. budgetary information). However, the Norand system does not have a planning system.

Next, Norand does not have a construction system to track material consumption and progress for each project. The various citations to Reference X1 page 2 show the tracking of material consumption for each project but fails to show a plurality of projects

Moreover, neither Norand nor Coble shows the claimed design system to perform site engineering assessment including environmental concerns. The Office Action acknowledged that Norand does not teach a design system to perform site engineering assessment; but asserts that Coble teaches: a design system to perform site engineering assessment and notes that Page 4 paragraph 1 line 5-7 of Coble shows the handheld

system incorporates computer aided design (CAD) drawings to record construction activities (i.e. site engineering assessment).

Applicants respectfully traverse the combination of Cobble and Norand. Coble shows a CAD system. However, site engineering assessment, as known in the construction industry, relates to environmental assessment. This terminology is now explicitly in the amended independent claim for clarification.

As neither Norand nor Cobble shows each element of the claims, withdrawal of the Section 103 rejection is requested.

Applicant notes that the present rejection does not establish *prima facie* obviousness under 35 U.S.C. § 103 and M.P.E.P. §§ 2142-2143. The Examiner bears the initial burden to establish and support *prima facie* obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976). To establish *prima facie* obviousness, three basic criteria must be met. M.P.E.P. § 2142. First, the Examiner must show some suggestion or motivation, either in the Norand reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference so as to produce the claimed invention. M.P.E.P. § 2143.01; *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Secondly, the Examiner must establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Thirdly, the Examiner must establish that the prior art references teach or suggest all the claim limitations. M.P.E.P. §2143.03; *In re Royka*, 180 U.S.P.Q. 580 (CCPA 1974). The teachings, suggestions, and reasonable expectations of success must be found in the prior art, rather than in Applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (CAFC 1991). Applicant respectfully

submits that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails on at least two of the above requirements.

First, Norand fails to disclose a number of claimed elements. Moreover, the design assessments in Coble shows that the construction foreman only performs constructability reviews, not pre-design planning and design management. Coble does not teach pre-design planning and design management as a design system to perform site-engineering assessment that includes: Environmental site assessments. Coble does not show other site engineering assessments relating to Utility, Conflicts and Relocations, Planning of Multi-Project Coordination at the same work location, Geotechnical Investigations, Coordination Survey Activities, Real Estate and Right-Of-Way Acquisitions, Archeological Investigations, Design Audits of Engineering Calculations.

Moreover, Norand and Coble does not teach pre-design planning and design management as a design system to perform assembly of Construction Documentation including: Drawings, Cost Estimates, Projects Specifications, Bid Package Documents and Bid Tabulation Evaluations. Further, Norand and Coble does not teach using the handheld computers as part of the design and planning system to coordinate design conflicts and construction sequencing for multi-project construction activities competing for the same equipment, real estate, and resources.

Applicant points out that the Examiner bears the initial burden of factually establishing and supporting any *prima facie* conclusion of obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976); M.P.E.P. § 2142. If the Examiner does not produce a *prima facie* case, the Applicant is under no obligation to submit evidence of nonobviousness. *Id.* In the instant case, the Examiner has not pointed to any evidence in

Norand, or how knowledge of those skilled in the art, provide a suggestion or motivation to modify the reference teaching so as to produce the claimed invention. See *In re Zurko*, 59 U.S.P.Q.2d 1693 (Fed. Cir. 2001) ([I]n a determination of patentability the Board cannot simply reach conclusions based on its understanding or experience - or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings).

Under *Vaeck*, absent any evidence of a cited suggestion or reasonable motivation in the Norand reference, or knowledge of those skilled in the art, *prima facie* obviousness of claims 1-22 (and those dependent therefrom) has not been established. As such, it is respectfully requested that the § 103(a) rejection of all claims be withdrawn and the claims be allowed.

CONCLUSION

Applicant believes that the above discussion is fully responsive to all grounds of rejection set forth in the Office Action.

Authorization to charge a one month extension fee (small entity) or any other required small entity fees to Deposit Account 50-3398 is granted.

If for any reasons the Examiner believes a telephone conference would in any way expedite resolution of the issues raised in this appeal, the Examiner is invited to telephone the undersigned at 408-528-7490.

Respectfully submitted,

By: 

Bao Tran
Reg. No. 37,955